# PATENT ABSTRACTS OF JAPAN

(11)Publication number:

11-235692

(43)Date of publication of application: 31.08.1999

(51)Int.CI.

B26D 1/00

(21)Application number: 10-037285

(71)Applicant: OJI PAPER CO LTD

(22)Date of filing:

19.02.1998

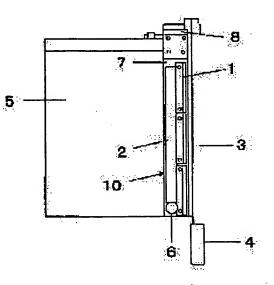
(72)Inventor: DAIMON HIROYUKI

## (54) HAND PUSH CUTTER HAVING SHEET PRESSING JIG

#### (57)Abstract:

PROBLEM TO BE SOLVED: To accurately and simply cut a sheet material by providing a easily bent pressing plate, a magnet mechanism for attracking the pressing plate to a table, an L-shaped projector for protecting fingers, which is divided into two parts or more, and a pivot for pivoting a sheet pressing jig.

SOLUTION: In using the cutter, a grip 4 is held to raise an upper blade 3, and subsequently, a sheet pressing jig 10 having a transparent resin-made 5 L-shaped protector 1 is turned upward on a hinge 8 with a knob 6 gripped. Secondly, a sheet to be cut is set on a table 5, and again the sheet pressing jig 10 is lowered to be placed on the sheet. At this time, the sheet is fixed between a magnet 2 buried in the sheet pressing plate 7 and a metallic table 5 with magnetic force. In cutting the sheet, when the grip 4 is held to pull down the upper blade 3, the sheet is clamped between the upper and lower blades 3, 9 and subjected to the force for moving laterally, but the sheet can be cut without slippage because frictional force is generated by pressing with magnetic force.



#### **LEGAL STATUS**

[Date of request for examination]

Date of sending the examiner's decision of rejection

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of reiection]

Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

\* NOTICES \*

¥

Japan Patent Office is not responsible for any damag s caused by th use of this translation.

- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

#### **CLAIMS**

[Claim(s)]

[Claim 1] A pushing-out cutter of a method which puts between this lower edge and an upper edge which rotates an end as the supporting point, and is cut out after setting a sheet-like material of one sheet or two or more sheets characterized by providing the following on a table which has a lower edge in one side edge, pressing it down with a sheet presser-foot fixture and fixing This sheet presser-foot fixture is the pressure plate made of metal or resin which can bend easily. A magnet device for making a pressure plate stick to a table L character mold personal protective equipment which protects a finger divided or more into at least two The supporting point which makes a sheet presser-foot fixture rotatable

[Translation done.]

\* NOTICES \*

Japan Patent Office is not responsible for any damages caus d by th use of this translation.

- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

#### **DETAILED DESCRIPTION**

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] This invention relates to the pushing-out cutter equipped with the sheet presser-foot fixture which can moreover cut out a sheet-like material simple to safety and accuracy.

[0002]

[0003]

[Description of the Prior Art] As a simple means to cut out a sheet-like material, although the pushing-out cutter had been used, a mere tabular object must be taken up and down on a hinge, the sheet presser-foot fixture could be pressed down by hand, the sheet-like material had to be fixed, and it could not uniformly and fully fix, but the conventional sheet presser-foot jig had the defect from which a sheet-like material shifts all around during cutting. When two or more sheets were cut out especially, under the effect of the thickness of a sheet-like material, the resistance at the time of cutting was strong, and there was a defect from which a sheet-like material shifts greatly. Moreover, on the occasion of cutting, according to the force to force, the bottom of an edge was approached, and a sheet presser-foot fixture and a finger are risk, and, for the reason, were not able to \*\*\*\* to accuracy and safety. on the other hand -- many -- although there is a guillotine cutter etc. as equipment which cuts out the sheet-like material of several sheets to accuracy -- few -- it was unsuitable for the use which wants to cut out several sheets simple.

[Problem(s) to be Solved by the Invention] The technical problem of this invention is a thing which the trouble of the sheet presser-foot fixture accompanying the conventional pushing-out cutter was solved, could moreover cut the sheet-like material simple to safety and accuracy, developed the sheet presser-foot fixture which can respond at it even if the thickness of the sheet-like material cut out further became thick, and was equipped with such a sheet presser-foot fixture

and for which its way is forced and a cutter is offered.

[0004] In this invention, rotate around the supporting point prepared in the end, and the sheet presser-foot fixture which can be taken up and down is equipped with a magnet. Even if a sheet-like material becomes thick, in order to prevent a gap of front and rear, right and left of a sheet-like material by magnetic adsorption power, to consider as structure fixable simple, and to consider as the structure where a gap can be prevented, further, While using the construction material which can bend in the pressure plate of a sheet presser-foot fixture, by dividing L character mold personal protective equipment, the measures against thickness are taken and it came to complete this invention.

[Means for Solving the Problem] This invention sets a sheet-like material of one sheet or two or more sheets on a table which has a lower edge in one side edge. In a pushing-out cutter of a method which puts between this lower edge and an upper edge which rotates an end as the supporting point, and is cut out after pressing down and fixing with a sheet presser-foot fixture Metal or a pressure plate made of resin by which this sheet presser-foot fixture can be bent easily, It is the pushing-out cutter equipped with a sheet presser-foot fixture characterized by having a magnet device for making a pressure plate stick to a table, L character mold personal protective equipment divided or more into at least two prepared in order to protect a finger, and the supporting point which makes a sheet presser-foot fixture rotatable.

[0006]

[Embodiment of the Invention] The pushing-out cutter of this invention has the upper edge rotatable as the supporting point, and the sheet presser-foot fixture for the table which has a lower edge in one side edge, and the end as a basic component. Furthermore, the sheet presser-foot fixture of these has the supporting point made rotatable, in order to take up and down the pressure plate made of metal or resin which can bend easily, the magnet device for making a pressure plate stick to a table, the L character mold personal protective equipment divided or more into at least two prepared in order to protect a finger, and a sheet presser-foot fixture.

[0007] Especially the magnet device with which the sheet presser-foot fixture of this invention is equipped can be manufactured by [ which do not bar bending of a sheet presser-foot fixture ] attaching the magnet of the shape of a flexible sheet in a sheet presser-foot fixture like, or using a disc-like magnet as installation and using two or more table sides as the metal magnetic substance, although not limited. On the contrary, a magnet is embedded on a table and it is good also considering the pressure plate of a sheet presser-foot fixture as the metal magnetic substance. Moreover, a magnet may be used for both a sheet presser-foot fixture and a table. Moreover, a pressure plate is used as the sheet metal of the product made of resin, or metal so that a sheet presser-foot fixture can bend, but in case this lifts the sheet presser-foot fixture currently attracted by the table with the magnet while it corresponds to the thickness when cutting out two or more sheet-like materials, it is also for making it easy to separate from a table.

[0008] Although especially the construction material of the L character mold personal protective equipment used for this invention is not limited, it is desirable that it is a product made of resin, and a transparent thing is desirable when safety and operability are taken into consideration. Moreover, the reason for dividing L character mold personal protective equipment or more into at least two is for not barring bending of the main part of a sheet presser-foot fixture. Moreover, when it is desirable that it is at least 1cm or more as for the height of L character mold personal protective equipment and it is lower than this, it has a possibility of turning off a finger. Moreover, in order that a sheet presser-foot fixture may make easy attachment and detachment of the sheet-like material to cut, around the revolution supporting point, it is made into rotatable structure and makes taking up and down easy. Moreover, in order to carry out exact cutting, it is desirable to isolate from the cutting section for less than 2-5mm, and to equip a sheet presser-foot fixture.

[0009]

[Example] Hereafter, although a drawing explains the example of this invention to details, of course, this invention is not limited to this. The \*\* type structure of one example of the pushing-out cutter equipped with the sheet presser-foot fixture of this invention is shown in drawing 1 and drawing 2. The front view in which drawing 1 shows the whole structure, and drawing 2 are the side elevation. This example is the object which converted the sheet presser-foot fixture of the conventional pushing-out cutter, and made the pushing-out cutter of this invention as an experiment. The pressure plate 7 which is the main configuration section of the sheet presser-foot fixture 10 is manufactured by the resin which is easy to bend, embeds the tabular magnet 2 at this pressure plate 7 made of resin, and makes it the device which the sheet presser-foot fixture 10 rotates by using a hinge 8 as the supporting point. Furthermore, three pieces and a tongue 6 are attached in this pressure plate 7 for the L character mold personal protective equipment 1 made of resin of transparence, and the sheet presser-foot fixture 10 is constituted in it. Moreover, the upper edge 3 of a pushing-out cutter, the grip 4, the lower edge 9, and the metal table 5 grade have diverted the thing of the conventional pushing-out cutter as it is. [0010] On the occasion of an activity, a grip 4 is held, the upper edge 3 is rotated around the supporting point, and a tongue 6 is held for the sheet presser-foot fixture 10 following the upper part, and it is raised up, using a hinge 8 as the supporting point. The sheet to cut out is set on a table 5, and again, the sheet presser-foot fixture 10 is lowered caudad, and is placed on a sheet. At this time, a sheet is fixed by magnetism between the magnet 2 embedded at the sheet pressure plate 7, and the metal table 5. In case it \*\*\*\*s, a grip 4 is held and the upper edge 3 is pulled down below. Although the force which is put with the upper edge 3 and the lower edge 9, and moves to a longitudinal direction is received when a sheet is cut out, it can \*\*\*\* without frictional force's occurring and a sheet shifting, since it is pressed down by magnetism.

[0011]

[Effect of the Invention] By forcing one's way, as explained above, in case [ at which it had the sheet presser-foot of this invention ] a cutter cuts out a sheet-like material, by equipping a sheet presser-foot fixture with a magnet, immobilization of a sheet-like material and a sheet presser-foot fixture is easy for it, it can prevent a gap in front and rear, right and left, and can cut it out correctly and simple. Moreover, as a hand does not approach near the edge, while it is safe by attaching the L character mold personal protective equipment which made the pressure plate of a sheet presser-foot fixture the construction material which is easy to bend, and was carried out at least 2 \*\*\*\*s, also when a sheet-like material is thick, immobilization of a sheet-like material is easy, and the effect are easy to detach also when separating a sheet presser-foot fixture from a table is done so.

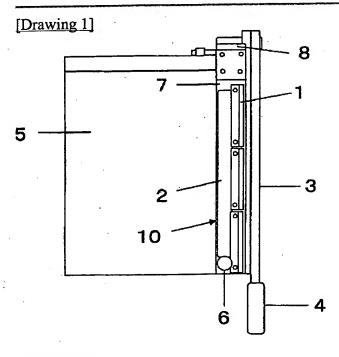
[Translation done.]

\* NOTICES \*

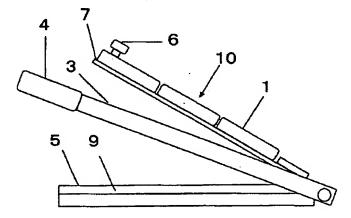
Japan Patent Office is not responsible for any damages caused by the use of this translation.

- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.\*\*\*\* shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

### **DRAWINGS**



## [Drawing 2]



[Translation done.]